

New species and new records of Hersiliidae from Australia (Arachnida, Araneae, Hersiliidae). Fifth supplement to the revision of the Australian Hersiliidae.

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Abstract – Four new species of Hersiliidae from Western Australia and Queensland are described: *Hersilia mainae* sp. nov., *Tamopsis jongi* sp. nov., *Tamopsis petricola* sp. nov. and *Tamopsis weiri* sp. nov. New records of several other *Tamopsis* species from the Northern Territory, Western Australia, South Australia, New South Wales, Queensland and Victoria are presented. The specific epithets *T. daviesi* Baehr and Baehr and *T. forresti* Baehr and Baehr are here emended to *T. daviesae* and *T. forrestae*, respectively.

INTRODUCTION

Recent field work by a number of collectors, including the authors, has produced many additional hersiliid specimens from Australia since the last supplement in the ongoing revision of the Australasian members of the family (Baehr and Baehr 1993a). Although much of this material comprised previously described species, the discovery of a new species of *Hersilia* from Western Australia and three new species of *Tamopsis* from Western Australia and Queensland further highlights that the Australian hersiliid fauna is far from well-known. Indeed, that fauna is now known to comprise 50 species, 22 of which have been described since the original revision (Baehr and Baehr 1987).

The systematic sequence of taxa follows Baehr and Baehr (1987, 1993b).

It is a pleasure to dedicate this paper to Barbara York Main, in appreciation of her work on Australian arachnids.

MATERIALS AND METHODS

The abbreviations follow previous papers (Baehr and Baehr 1987, 1988, 1989, 1992, 1993a, 1993b), and the specimens examined in this paper are lodged in the following institutions: Australian Museum, Sydney (AMS); Collection Baehr, München (CBM); Museum of Victoria, Melbourne (NMV); Western Australian Museum, Perth (WAM). Measurements were made under a stereomicroscope with an ocular micrometer with up to 150x magnification.

Genus *Hersilia* Audouin

Hersilia Audouin, 1826: 318. For further records see

Baehr and Baehr (1987, 1993a), Brignoli (1983), Platnick (1989) and Roewer (1942).

Remarks

The authorship of this genus and all other arthropods in Savigny's *Description de l'Égypte* was confirmed as Audouin by Sherborn (1897).

Hersilia mainae sp. nov.

Figures 1a-e

Material Examined

Holotype

♀, N. of Larryoo, Western Australia, Australia, 14°51'S, 126°49'E, 13 June 1992, M.S. Harvey, J.M. Waldock, under large boulder (WAM 93/18).

Diagnosis

The third Australian species of *Hersilia* is closely related to *H. mimbis* Baehr and Baehr from Western Australia, but is distinguished by its slightly smaller size, broader epigyne and the longer RS.

Description

Female holotype

The female is not in good condition, some legs are lost and the colour is indistinct because of the loose cuticle.

Measurements: Length: 7.28 mm; cephalothorax length: 2.8 mm; width: 2.88 mm; abdomen length: 4.48 mm; width: 3.52 mm. Legs: I, II missing; III: 10.25 mm, IV: 27 mm. PLS length: 6.08 mm; bS: 1.2 mm; tS: 4.8 mm. Diameter of eyes: AME: 0.24 mm, ALE: 0.14 mm, PME: 0.3 mm, PLE: 0.3 mm. Eye

Remarks

Although widely distributed in eastern Australia (Baehr and Baehr 1987, fig. 48; Baehr and Baehr, 1988, 1992), this female is only the second specimen to be recorded from Victoria, and the first adult.

***Tamopsis brisbanensis* Baehr and Baehr**

Tamopsis brisbanensis Baehr and Baehr, 1987: 365.

New Material Examined

Australia: New South Wales: 1♂, Sydney, Australian Museum, Dec. 1984, B. Duckworth, det. M.R. Gray, *Tamopsis* sp. m (AMS KS16405); 1♂, Currawong, hanging on thread from *Banksia*, night coll., May 20 66, *Tamopsis* sp. (AMS KS15836); 1♀, Lorien Ref 3 km N of Landsdowne, near Taree, 17 12 87, G. Williams, det: C. Horseman; Hersiliidae F; *Tamopsis* (AMS KS30688).

Remarks

T. brisbanensis is widely distributed along the east coast of Australia (Baehr and Baehr 1987, fig. 49).

Tamopsis daviesae* group*Remarks**

The specific epithet '*daviesi*' was invalidly formed by Baehr and Baehr (1987), and is here corrected to the female form '*daviesae*', as the species was explicitly named for Valerie Davies. Similarly, the specific epithet of *Tamopsis forresti* Baehr and Baehr (1988), named for the collector of the type material, Jan Forrest, is here emended to '*forrestae*'.

***Tamopsis darlingtoniana* Baehr and Baehr**

Tamopsis darlingtoniana Baehr and Baehr, 1987: 371.

New Material Examined

Australia: Western Australia: 1♀, Jarrahdale, Langford Park, 23 Dec. 1993, S. Hamilton-Smith (WAM).

Remarks

This female represents only the third record of *T. darlingtoniana*, previously known from Darlington, and Murdoch, W.A. (Baehr and Baehr, 1987, 1993a).

Tamopsis queenslandica* group**Tamopsis kochi* Baehr and Baehr**

Tamopsis kochi Baehr and Baehr, 1987: 368.

New Material Examined

Australia: New South Wales: 1♂, 119 km W. of Cobar, at rest area, on shelter, 8am, 2 May 1992, A.F. Longbottom S.830 (WAM 93/25).

Remarks

First recorded from south-western Australia, this record from eastern Australia suggests that the distribution of *T. kochi* extends over the southern part of Australia.

***Tamopsis facialis* Baehr and Baehr**

Figure 2

Tamopsis facialis Baehr and Baehr, 1993a: 365.

New Material Examined

Australia: Western Australia: 1♂, Grasspatch 33°14'S, 121°43'E, Fitz. Loc. 41, 5 Dec. 1992, A.F. Longbottom, on fuel tank under trees, S1061 (WAM 93/1230).

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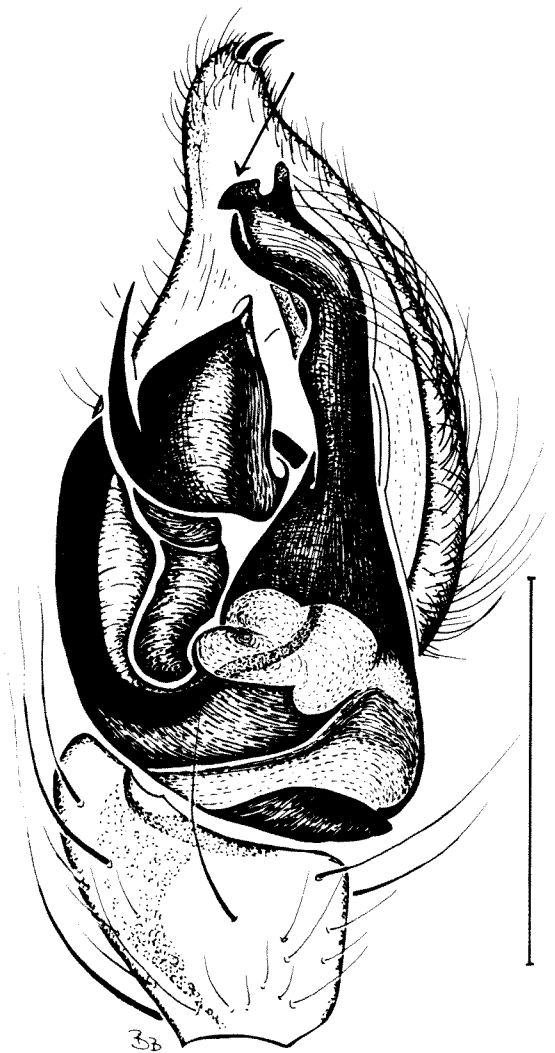


Figure 2 *Tamopsis facialis* Baehr and Baehr, right male palp, ventral view. Scale line = 0.5 mm.

Remarks

This is the second record of *T. facialis* from this locality. This species is closely related to *T. centralis* Baehr and Baehr. This new specimen has small intraspecific differences at the end of the LA (compare the arrowed structure of Fig. 2 with Baehr and Baehr 1993a, fig. 7).

***Tamopsis distinguenda* Baehr and Baehr**

Tamopsis distinguenda Baehr and Baehr, 1992: 66.

New Material Examined

Australia: Western Australia: 1 ♀, *Parmelia* 32°15'S, 115°47'E, 3 January 1992, A.E. de Jong (WAM 93/21).

Remarks

This record confirms the distribution of *T. distinguenda* in the southern part of Western Australia. The holotype was reported to have originated from 'Under wooden plank. On beach'. This should in fact read 'Under wooden plank. On bench'.

***Tamopsis weiri* sp. nov.**

Figures 3a, b

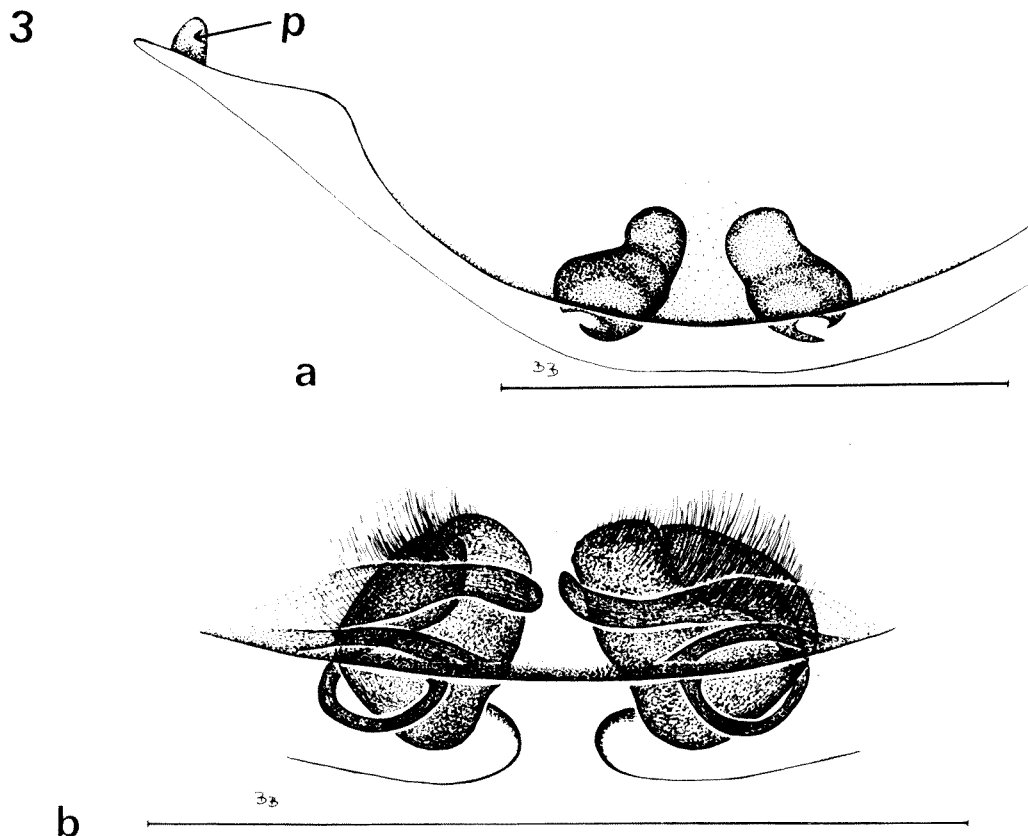


Figure 3 *Tamopsis weiri* sp. nov.: a, epigyne, ventral view; b, vulva, ventral view. Scale lines = 0.5 mm.

Material Examined**Holotype**

♀, 14 km S by E. Kalumburu Mission, Western Australia, Australia, 14°25'S, 126°40'E, 3–6 June 1988, T.A. Weir, beating/sweeping vegetation, closed forest, CALM site 4/3 (WAM 93/16).

Diagnosis

Medium-sized, low-eyed species, closely related to *T. gibbosa* Baehr and Baehr, *T. reevesbyana* Baehr and Baehr, *T. grayi* Baehr and Baehr and *T. darlingtoniana* Baehr and Baehr. Distinguished from these species by differences in the structure of the epigyne and vulva.

Description**Female holotype**

Measurements: Length: 4.1 mm; cephalothorax length: 1.6 mm; width: 1.6 mm; abdomen length: 2.5 mm; width: 2.5 mm. Legs: I: 9.5 mm; II: 9.42 mm; III: 3.83 mm; IV: 7.91 mm. Ratio: 1: 0.99: 0.40: 0.83. Ratio LB/LL I: 0.43. PLS length: 2.12 mm; bS: 0.52 mm; tS: 1.6 mm. Diameter of eyes: AME: 0.14 mm, ALE: 0.1 mm, PME: 0.14 mm, PLE: 0.18 mm. Eye ratio: AME/ALE 1:0.71; AME/PME 1:1; AME/PLE 1:1.28.

Colour: Cephalothorax yellowish, laterally

slightly mottled with black. Clypeus median light, laterally also mottled with black. Eye area black, an elongate spot behind the eyes and two spots laterally white. Sternum whitish yellow with some white spots at the margin. Abdomen whitish, LSS and lateral border mottled with dark, some distinct dark crossbars near apex. DMP light brown. Ventral side yellow with many white dots. Legs faintly annulate, all femora laterally with a dark stripe. PLS light, basis of ts and median part dark.

Cephalothorax: Apart from the clypeus circular. Eye area low, clypeus visible from above, 1/2 as high as eye area. AME 0.14 mm, slightly smaller than PME and PLE. PLE largest. Distance AME/AME 0.12 mm, smaller than diameter of AME. Distance AME/ALE 0.1 mm, about 2/3 diameter of AME. Distance PME/PME 0.06 mm, less than half a diameter of PME, distance PME/PLE 0.14 mm, equal to diameter of PME. Chelicerae ca. twice as long as wide. Sternum heart-shaped, sparsely setose anteriorly.

Abdomen: Wide, ca. 1.5x as wide as cephalothorax, as wide as long, distinctly trapezoid, widest posteriorly. Dorsally with 5 pairs of DMP, the third ellipsoid. VMP in a wide, v-shaped arrangement. PLS just about as long as abdomen.

Legs: Measurements see above. Medium-sized, III ca. 2/5 as long as I.

Epigyne: Similar to *T. grayi* but the pockets (p) situated more laterally. One pair of RS visible, like sausages in a roof-like shape (Fig. 3a).

Vulva: Two pairs of RS, the ventral one glandular along the lateral surface (Fig. 3b).

Male

Unknown.

Etymology

The name is a patronym in honour of T.A. Weir, ANIC, Canberra, who collected this specimen.

Distribution and Habits

Northern Western Australia. As the label data of the holotype reads "beating/sweeping vegetation, closed forest", this species probably lives on branches.

Relationships

The placement of *T. weiri* in the *queenslandica* group is slightly doubtful, because the male is still unknown. The species is obviously related to *T. gibbosa*, but is distinguished from this species by the lack of a dorsal hump in the middle of abdomen and by minor differences in the epigyne and vulva.

Identification

The key to the species in the fourth supplement (Baehr and Baehr 1993a) should be altered as follows:

32. Introductory ducts of vulva elongate, crossing RS, sometimes laterally sharply bent; ventral RS always distinctly glandular outside or anteriorly (Baehr and Baehr 1987, figs 18–20, 22, 24; Baehr and Baehr 1992, fig. 8; Baehr and Baehr 1993a, figs 9, 14; Fig. 3b) 33
33. Epigyne laterally of vulva with two small, sclerotized pockets on each side (Baehr and Baehr 1993a, fig. 9) [interior of southwestern Australia] . *Tamopsis piankai* Baehr and Baehr
Epigyne laterally of vulva without such pockets 34
34. Epigyne with a slit-like pocket near lateral border covered by a sclerotized plate (Baehr and Baehr 1993a, fig. 13; Fig. 3a) 34a
Epigyne without lateral pockets (Baehr and Baehr 1987 figs 18–20, 22, 24; Baehr and Baehr 1992, figs 7, 8; Baehr and Baehr 1993a, figs 11, 12) 35
- 34a. Abdomen in the middle with a dorsal hump [southwestern Australia]
..... *Tamopsis gibbosa* Baehr and Baehr
Abdomen without a hump [Northwestern Australia] *Tamopsis weiri* sp. nov.

Tamopsis tropica group

Tamopsis tropica Baehr and Baehr

Tamopsis tropica Baehr and Baehr, 1987: 379.

New Material Examined

Australia: Queensland: 1 ♀, Cape York, 19–20.5.1993, B. and M. Baehr (CBM); 1 ♂, 5. 12 km W Mt. Molloy, 22.5.1993, woodland on *E. alba*, B. and M. Baehr (CBM); 1 ♀, 26. Laura River 28 km N Laura, 29–30.5.1993, B. and M. Baehr (CBM); 1 ♀, 79. Walsh River, 8 km E Dimbulah, 7–8.6.1993, B. and M. Baehr (CBM).

Remarks

A common species of the northern part of Queensland and the Northern Territory.

Tamopsis pseudocircumvidens Baehr and Baehr

Tamopsis pseudocircumvidens Baehr and Baehr, 1987: 381.

New Material Examined

Australia: South Australia: 1 ♀, Blue Mine Creek,

30°10'S, 139°13'E, 15 May 1992, A.F. Longbottom, S. 835, under quartz rocks (WAM 93/24).

Remarks

This species was until now only known from one locality in southern Western Australia.

Tamopsis fickerti (L.Koch)

Chalinura fickerti L. Koch, 1876: 830.

Tamopsis fickerti (L. Koch): Baehr and Baehr 1987: 384; Baehr and Baehr, 1988: 16; 1992: 74.

New Material Examined

Australia: New South Wales: 1 ♀, 98.25 km SSE of Coonabarabran, *Eucalyptus*, 4.12.1990, B. and M. Baehr (CBM); 1 ♂, Connel's Point Sydney, on bark Jacaranda tree, 16 06 1990, J. Thompson, det. C. Horseman, Hersiliidae, *Tamopsis* (AMS KS23443).

Remarks

T. fickerti is common and widespread in southeastern Australia.

Tamopsis perthensis Baehr and Baehr

Tamopsis perthensis Baehr and Baehr, 1987: 386.

New Material Examined

Australia: Western Australia: 1 ♂, Bentley, 32°01'S, 115°55'E, 26 July 1977, field trial area on *Banksia*, WAIT No. J 307088 (WAM 92/116); 1 ♀, Bentley, 32°01'S, 115°55'E, 1 August 1978, P. Greathead, Christmas tree (*Nuytsia floribunda*) (WAM 92/118); 1 ♂, Bentley, 32°01'S, 115°55'E, 1 August 1978, H. Bastian, Christmas tree (*Nuytsia floribunda*) (WAM 92/119); 1 ♂, Bentley, 32°01'S, 115°55'E, 2 August 1977, A.T. Pefler, on *Banksia* tree, WAIT J 307087 (WAM 92/117); 1 ♂, Ferndale, 3 August 1986, J. Gibney, found on burnt Paperbark tree, donated by WAIT (WAM 92/123); 1 ♂, Lane Poole Reserve, 15 km S. of Dwellingup, O. Mueller, 16 November 1986, open Jarrah woodland, by head torch at night, running on the tree trunk (WAM 92/127); 1 ♂, Margaret River, 33°57'S, 115°04'E, 18 January 1992, A. F. Longbottom, house verandah (WAM 92/129); 1 ♀, Parmelia, near Kwinana, 16 November 1987, A.E. de Jong (9am), on tuart tree (WAM 92/134); 1 ♂, Yanchepp, on *Melaleuca* trunk, 7 October 1992, M.S. Harvey (WAM 93/35).

Remarks

This very common southwestern Australian species was caught mostly by hand from tree trunks.

Tamopsis longbottomi Baehr and Baehr

Tamopsis longbottomi Baehr and Baehr, 1993a: 382.

New Material Examined

Australia: Northern Territory: 1 ♀, Jim Jim Falls, 13°17'S, 132°50'E, 31 May 1992, M.S. Harvey, J.M.Waldock (WAM 93/29).

Remarks

This very distinctive species was until now known from only two localities in the northern part of Northern Territory.

Tamopsis jongi sp. nov.

Figures 4a-d

Material Examined

Holotype

♂, Kalkan Kalkan, Rudall River National Park, Western Australia, Australia, ca. 22°34'S, 122°19'E, 10 August 1992, A.E. de Jong (#68) (WAM 93/1232).

Paratype

Australia: Western Australia: 1 ♀, Rudall River National Park, ca. 22°34'S, 122°19'E, 19 Aug. 1992, A.E. de Jong (#65) (WAM 93/1233).

Diagnosis

Medium-sized species of the *tropica* group with high eye area, large AME and elongate legs. Recognized by the apex of LA of the male palpus and the structure of epigyne and vulva of the female.

Description

Male holotype

Measurements: Length: 4.6 mm; cephalothorax length: 1.92 mm; width: 1.8 mm; abdomen length: 2.8 mm; width: 2.0 mm. Legs: I: 18.75 mm; II 17.58 mm; III: 5.75 mm, IV: 15.5 mm. Ratio: 1:0.93:0.31:0.83. Ratio LB/LLI: 0.25. PLS length: 2.4 mm; bS: 0.6 mm; tS: 1.8 mm. Diameter of eyes: AME: 0.2 mm, ALE: 0.04 mm, PME: 0.14 mm, PLE: 0.16 mm. Eye ratio: AME/ALE 1:0.2; AME/PME 1:0.7; AME/PLE 1:0.8.

Colour: Cephalothorax with dark brown pattern. Border, radial stripes, eye area and median part of clypeus black. Behind the eye area a light spot. Sternum light with lateral white spots. Abdomen anteriorly dark brown, posteriorly whitish. Ventral side of abdomen light, behind the epigastral groove with white spots. Legs light yellow, only femora, patellae and tibiae indistinctly annulate. PLS posteriorly with a light brown stripe.

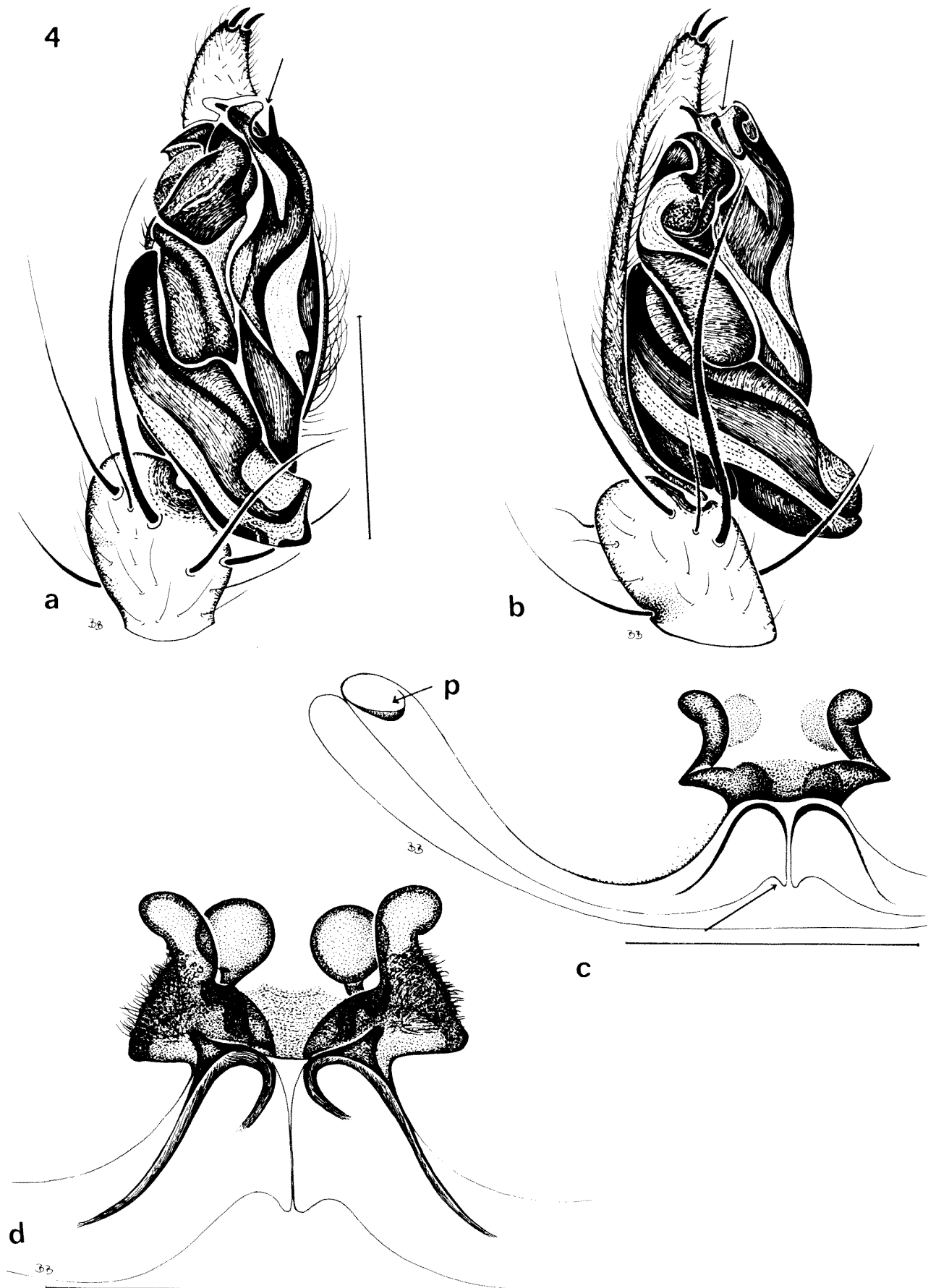


Figure 4 *Tamopsis jongi* sp. nov.: a, right male palp, ventral view; b, right male palp, median view; c, epigyne, ventral view; d, vulva, ventral view. Scale lines = 0.5 mm.

Cephalothorax: Circular, slightly longer than wide. Eye area strongly raised, clypeus visible from above, as high as eye area. AME the largest. Distance AME/AME 0.12 mm, slightly $>1/2$ diameter of AME, distance AME/ALE 0.08 mm, $<1/2$ diameter of AME. Distance PME/PME 0.1 mm, ca. $3/4$ diameter of PME, distance PME/PLE 0.16 mm, as large as diameter of PLE. Chelicerae ca. twice as long as wide. Sternum pentagonal with some hairs.

Abdomen: Elongate, 1.4 as long as wide. Dorsally with five pairs of DMP, shape and size like in *T. occidentalis*. VMP in a narrow v-shaped arrangement. PLS shorter than abdomen, tS moderately elongate.

Legs: Elongate, measurements see above.

Palpus: MTA strongly contorted. Apex with a large membranous area and a scopula-like organ within. Distal rim with an excavate hook. Median rim high, as high as the hook. LA elongate and contorted, apex with one small median (Fig. 4b, arrow) and one deep laterally U-shaped incision (Fig. 4a, arrow).

Female paratype (WAM 93/1233)

Measurements: Length: 5.08 mm; cephalothorax length: 2.0 mm; width: 1.92 mm; abdomen length: 3.08 mm; width: 2.58 mm. Legs: I: 14.33 mm; II 13.67 mm; III: 4.58 mm, IV: 13.0 mm. Ratio: 1:0.95:0.32:0.91. Ratio LB/LLI: 0.35. PLS length: 2.76 mm; bS: 0.72 mm; tS: 2.04 mm. Diameter of eyes: AME: 0.14 mm, ALE: 0.08 mm, PME: 0.1 mm, PLE: 0.12 mm. Eye ratio: AME/ALE 1:0.57; AME/PME 1:0.71; AME/PLE 1:0.85.

Colour: There is a considerable variation in colour, but the ground pattern is similar. In contrast to the male holotype, the median part of the cephalothorax is pale and the dorsal side of the abdomen is white. Only the border is black.

Cephalothorax: Circular, slightly longer than wide. Eye area strongly raised, clypeus visible from above, as high as eye area. AME the largest. Distance AME/AME 0.14 mm, about equal to diameter of AME, distance AME/ALE 0.08 mm, $>1/2$ diameter of AME. Distance PME/PME 0.1 mm, about equal to diameter of PME, distance PME/PLE 0.18 mm, 1.5 diameter of PLE. Chelicerae ca. twice as long as wide. Sternum pentagonal with some hairs.

Abdomen: Elongate, 1.2 as long as wide. Arrangement of DMP and VMP as in male. PLS slightly shorter than abdomen.

Legs: Measurements see above. Shorter than in male.

Epigyne: Laterally with large pocket (p), similar to *T. marri*. Medially with two acute membranous flaps (Fig. 4c, arrow).

Vulva: With two RS. Basal bulbous glandular. Introductory ducts funnel-shaped, both ends pro-

cessed back and outwards. Vulva anteriorly with a sclerotized bar (Fig. 4d).

Etymology

Named in honour of A.E. de Jong, collector of the type specimens.

Distribution and Habits

Central Western Australia. Habits unknown.

Relationships

T. jongi is a highly evolved species of the *tropica* group (Baehr and Baehr 1987), and is extremely closely related to *T. occidentalis* Baehr and Baehr and *T. marri* Baehr and Baehr. It is distinguished from both species by minor differences of the male palpus, and the MTA of *T. jongi* with high rim, which is as high as the hook. The lateral excision of the LA apex is U-shaped.

Tamopsis petricola sp. nov.

Figures 5a, b

Material Examined

Holotype

♂, Miles, 20 km S. of (Leichhardt Highway), Queensland, Australia, 17 August 1992, A.F. Longbottom, S. 890, gravel pit rocks (WAM 93/26).

Diagnosis

Medium-sized species, with high eye area, large AME, and elongate legs, recognized by the male Pa with characteristic MTA. Apex of MTA very elongate, lateral rim projects beyond the similarly elongate hook-like process. LA without median excision and with a small lateral excision only.

Description

Male holotype

Measurements: Length: 4.16 mm; cephalothorax length: 1.76 mm; width: 1.68 mm; abdomen length: 2.4 mm; width: 1.68 mm. Legs: I: 21.67 mm; II 19.17 mm; III: 5.58 mm, IV: 18.58 mm. Ratio: 1:0.88:0.25:0.85. Ratio LB/LLI: 0.19. PLS length: 2.28 mm; bS: 0.64 mm; tS: 1.64 mm. Diameter of eyes: AME: 0.18 mm, ALE: 0.1 mm, PME: 0.16 mm, PLE: 0.16 mm. Eye ratio: AME/ALE 1:0.55; AME/PME 1:0.88; AME/PLE 1:0.88.

Colour: Cephalothorax with brown pattern. Border, radial stripes, eye area, and median part of clypeus black. Sternum mottled with dark. Abdomen mottled, with light brown LSS. Ventral surface whitish, around the spinnerets dark. Legs light yellow, only femora, patellae and tibiae annulate. PLS posteriorly with two dark stripes.

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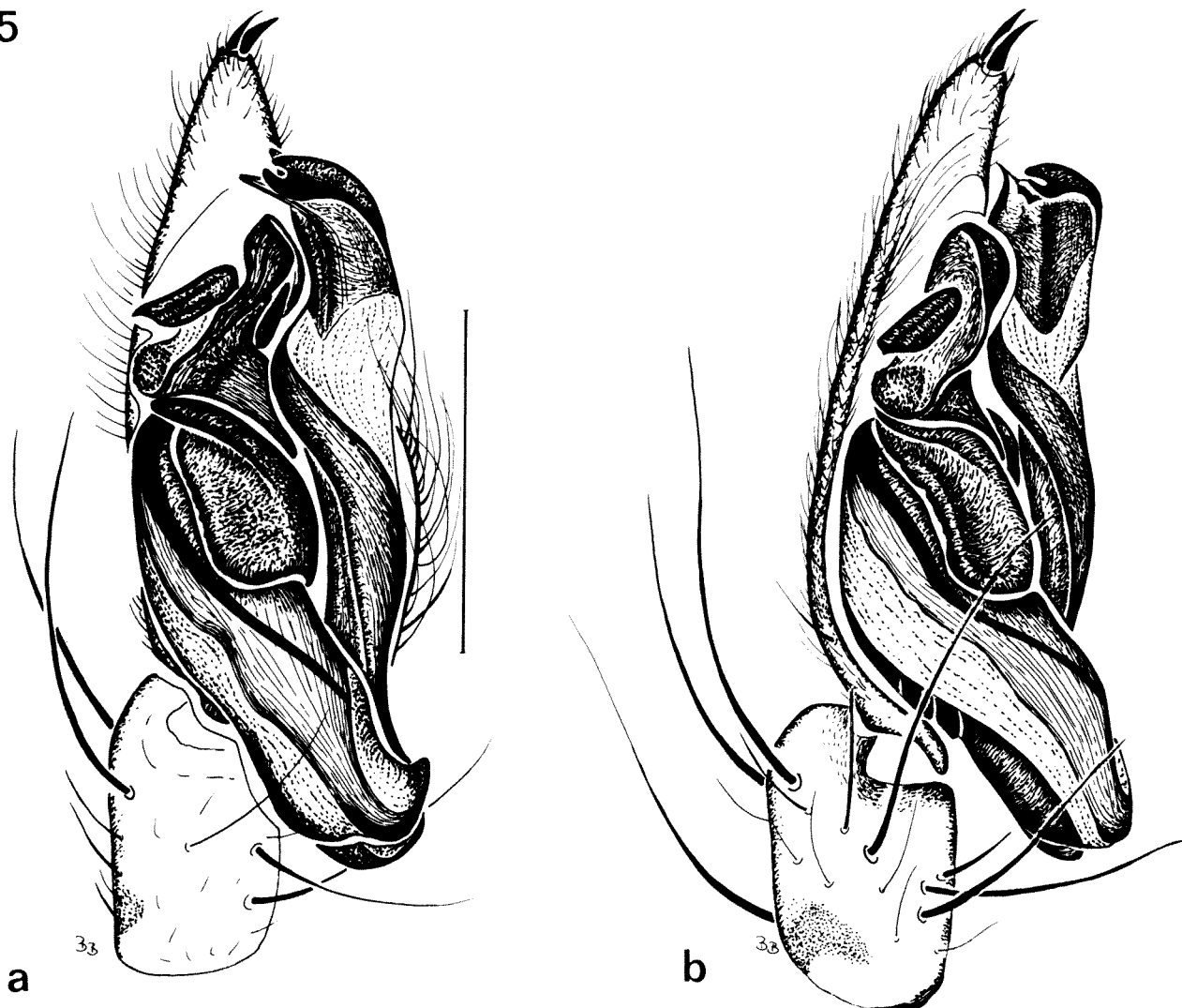


Figure 5 *Tamopsis petricola* sp. nov.: a, right male palp ventral view; b, right male palp, median view. Scale lines = 0.5 mm.

Cephalothorax: Circular, slightly longer than wide. Eye area strongly raised, clypeus visible from above, as high as eye area. AME the largest. PLE as large as PME. Distance AME/AME 0.14 mm, less than diameter of AME, distance AME/ALE 0.04 mm, < 1/4 diameter of AME. Distance PME/PME 0.06 mm, about 1/3 diameter of PME, distance PME/PLE 0.14 mm, less than diameter of PLE. Chelicerae twice as long as wide. Sternum pentagonal with some hairs.

Abdomen: Elongate, 1.4 as long as wide. Dorsally with five pairs of circular DMP, shape and size like *T. occidentalis*. VMP in a narrow v-shaped arrangement. PLS shorter than abdomen, tS moderately elongate.

Legs: Measurements see above. Very elongate.

Palpus: MTA strongly contorted. Apex with a large membraneous area and a scopula-like organ within. Ventral border with strong, elongate roof-like hook. Lateral rim elongate, projecting beyond the hook. LA elongate and contorted, apex with one small U-shaped lateral incision (Figs 5a, b).

Etymology

Alludes to the occurrence on gravel pit rocks.

Distribution and Habits

Southeastern inland Queensland. The holotype male was caught from gravel pit rocks.

Relationships

T. petricola is a highly evolved but isolated species of the *tropica* group (Baehr and Baehr 1987). It is clearly distinguished from the other species of this group by the very elongate apex of MTA with its strong, elongate, roof-like hook, by the lateral rim of MTA that projects beyond the hook, and by the small, U-shaped lateral excision of LA.

Identification

For identification of *T. jongi* and *T. petricola*, the key to the species in our fourth supplement (Baehr and Baehr 1993a) should be altered as follows:

27. LA with a deep median and a narrow lateral excision (Baehr and Baehr 1987, fig. 41e)

- [central western Australia south of Great Sandy Desert]
 *Tamopsis occidentalis* Baehr and Baehr
- LA without or with less deep median excision (Baehr and Baehr 1989 fig. 4; Figs 4b, 5b)
 27a
- 27a. LA without median excision, lateral excision very small (Fig. 5b); apex of MTA very elongate, strong hook-like process also very elongate, dorsally with rims, lateral rim of apex high and elongate, projecting beyond the hook-like process (Fig. 5b) [southeastern inland Queensland] . *Tamopsis petricola* Baehr
- LA with less deep median excision, lateral excision deep (Baehr and Baehr 1989, fig. 3; Fig. 4b, arrow) 27b
- 27b. Lateral excision of LA nearly circular, both processes rounded (Baehr and Baehr 1989, fig. 3); lateral rim high, lamelliform, but posteriorly not so high as the hook [southwestern Australia, southwestern New South Wales]
 *Tamopsis marri* Baehr and Baehr
- Lateral excision of LA U-shaped with a rounded and a sharp process (Fig. 4a, arrow); lateral rim of MTA high, lamelliform, posteriorly as high as the hook (Fig. 4b) [central Western Australia, Gibson Desert] *Tamopsis jongi* Baehr

Tamopsis occidentalis Baehr and Baehr

Tamopsis occidentalis Baehr and Baehr, 1987: 387.

New Material Examined

Australia: Western Australia: 1 ♀, Gascoyne River, ca. 24°51'S, 114°34'E, 6 August 1992, A.E. Jong (#60) (WAM 93/31).

Remarks

A very common species in the northern part of Western Australia.

Tamopsis fitzroyensis Baehr and Baehr

Tamopsis fitzroyensis Baehr and Baehr, 1987: 389.

New Material Examined

Australia: Western Australia: 1 ♀, 1 ♂, Manning Gorge, 16°44'S, 125°57'E, 24 December 1991, G. Harold, on boab tree (WAM 93/19-20).
Queensland: 4 ♀, 2 ♂, 42. Sand flat creek, ca. 35 km S. Palmer River, ca. 16°01'S, 144°40'E, 23.5.1993, B. and M. Baehr on *E. camaldulensis* (CBM); 1 ♀, 24. Morehead River, ca. 35 km SE. Musgrave, ca.

14°59'S, 143°50'E, 29.5.1993, B. and M. Baehr, on *E. camaldulensis* (CBM); 2 ♀, 7. Sand flat creek, ca. 40 km W. McLeod River, ca. 16°0'S, 144°40'E, 23.5.1993, B. and M. Baehr, on *E. camaldulensis* (CBM).

Remarks

This highly evolved species of the *tropica* group was only known until now from the northern part of Western Australia. The new records from Northern Queensland suggest that the range of this species covers all of northern Australia.

DISCUSSION

The three newly described species of *Tamopsis*, each known from only single localities, belong to two rather different groups. The low eyed northwestern species *T. weiri* belongs obviously to the *queenslandica* group and is closely related to *T. gibbosa* from southwestern Australia.

T. jongi and *T. petricola* are placed within the *tropica* group due to the strongly raised eye area. The eastern species *T. petricola* is very isolated within this group, because of its characteristic MTA. *T. jongi*, recorded only from Western Australia, is closely related to the highly evolved western species *T. marri* and *T. occidentalis*.

The new records of *T. kochi*, *T. pseudocircumvidens* and *T. fitzroyensis* give us new information about their distribution. The new records of *T. pseudocircumvidens* from South Australia and *T. kochi* from New South Wales point obviously to a southern distribution of these species. The known range of *T. fitzroyensis* is here extended from northern Western Australia to northern Queensland, which indicates a circumtropical distribution in the northern part of Australia for this species.

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